

# DAY TWO: Sky and Water

## Thin-Skinned Water

For every child, gather

- Plastic or paper bowl half-filled with water
- 3 toothpicks
- A shallow container with a small amount of dish detergent

### Introduce

Water has many amazing characteristics. Today we're going to see how water molecules hold on to each other!

### Do

1. Lay two toothpicks beside each other in the water. **What do they do?**
2. With a third toothpick, pick up a drop of dish detergent.
3. Touch the soapy toothpick tip between the floating toothpicks. **What happens?**



### Why It Works

Water molecules hold on to each other. Some people call them "sticky" molecules. Because of the way the molecules hold together, the surface of the water in your cup acts as if it has a thin skin on top. This is called surface tension. It allows the toothpicks to float on top. When the dish detergent touches the water, it breaks the molecular bonds of the surface. The water molecules move outward and take the floating sticks with them!

### Prayer and Praise

What would our clothes look like if we washed them only in water? What other things do we use soap or detergent to wash? (Dishes. Cars.) Invite several volunteers to pray, thanking God for ways we use water, besides drinking it. (Optional: Students draw pictures of ways we use water and then add written prayers to their papers.)